

ColorRx® PCABS-3000RX

Americhem - Polycarbonate + ABS

General Information
Product Description

PCABS-3000RX is a high flow injection molding grade of polycarbonate and acrylonitrile butadiene styrene (PC+ABS) alloy with improved chemical resistance. It is suitable for healthcare applications.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Biocompatible	• Ethylene Oxide Sterilizable	• Radiation Sterilizable
	• E-beam Sterilizable	• Excellent Colorability	
Uses	• Closures	• Housings	• Medical/Healthcare Applications
	• Engineering Parts	• Industrial Parts	• Surgical Instruments
Agency Ratings	• ISO 10993		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.15		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	20	g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	ASTM D955
Water Absorption (24 hr, 73°F)	0.40	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	8300	psi	ASTM D638
Tensile Strength (Break)	7200	psi	ASTM D638
Tensile Elongation (Yield)	4.0	%	ASTM D638
Tensile Elongation (Break)	50	%	ASTM D638
Flexural Modulus	310000	psi	ASTM D790
Flexural Strength (Yield)	12900	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	10	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	220	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Suggested Shot Size	30 to 60	%
Rear Temperature	480 to 540	°F
Middle Temperature	490 to 550	°F
Front Temperature	500 to 565	°F
Nozzle Temperature	515 to 555	°F
Processing (Melt) Temp	505 to 565	°F
Mold Temperature	140 to 190	°F
Back Pressure	50.0 to 150	psi
Screw Speed	30 to 75	rpm

Vent Depth

1.5E-3 to 3.0E-3 in

